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(54) Title: PSEUDOTYPED RETROVIRUSES AND STABLE CELL LINES FOR THEIR PRODUCTION

(57) Abstract: Cells that produce inventive pseudotyped retroviruses having a broad host range have been produced. In one aspect of the invention, the cells produce retroviruses pseudotyped with at least two different viral glycoproteins, such as togaviral glycoproteins. In alternative embodiments, the cells produce retroviruses pseudotyped with filoviral glycoproteins. Methods of producing the above-described cells, as well as the pseudotyped retroviruses thus produced, are also provided. In other embodiments, methods of screening agents effective in blocking viral entry into a cell, including filoviral entry or entry of viruses having at least two different viral glycoproteins disposed in their lipid bilayer, such as togaviruses, are provided. Moreover, methods of using the inventive pseudotyped retroviruses for introducing nucleotide sequences into target cells, and kits for forming the inventive pseudotyped retroviruses, are also provided.

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